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In re Application of:

Alexander W. OXFORD et al

Serial Number 231,274

Filed: August 12, 1988

For: INDOLE DERIVATIVES

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Group Art Unit: 125

TANG FAN

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GROUP 120

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231

Sir:

Prior to an examination on the merits, Applicants wish to direct the attention of the Examiner to the following information which may be material to the prosecution of the above identified application. The published documents are listed on the attached Form PTO-1449, and a copy of each available publication is attached for the convenience of the Examiner.

U.K. Patent Application No. 2124210A (published Feb. 15, 1984; Corresponding to U.S.S.N. 789,831, filed Oct. 21, 1985); European Patent Application No. 147107 (published July 3, 1985; corresponding to U.S.S.N. 030,325, filed March 26, 1987); U.K. Patent Application No. 2150932A (published July 10, 1985; corresponding to U.S.S.N. 072,786, filed July 13, 1987); U.K. Patent Application No. 2162522A (published Feb. 5, 1986; corresponding to U.S.S.N. 082,666, filed August 7, 1987); U.K. Patent Application No. 2168973A (published July 2, 1986; corresponding to U.S.S.N. 804,102, filed December 3, 1985); U.S.S.N. 007,575, filed January 28, 1987; and U.S.S.N. 066,498, filed June 26, 1987, all describe 5-sulphon-amido substituted indoles for use in treating migraine. However, in no case are compounds disclosed in which the 3-position substituent is a piperidinyl or tetrahydropyridinyl group as in the presently claimed compounds.

DE 3419935A (published October 28, 1985) corresponds to U.S.

Serial Number 231,274

Patent 4,711,893 and discloses 3-tetrahydropyridylbutyl indole derivatives for use in the treatment of migraine. The indole nucleus is substituted at the 4-, 5-, 6- or 7-position by a hydroxy group.

Guillaume et al, Eur. J. Med. Chem., 22, 1987, 33-43, discloses 3,5-disubstituted indole derivatives in which the 3-position substituent is a piperidinyI or tetrahydropyridinyI group having utilities associated with interaction at serotonin (5HT) receptors. This paper relates to the synthesis of a series of 3-(1,2,3,6-tetrahydropyridin-4-yl)1H-indoles and the study of their serotonergic and/or anti-dopaminergic properties. There is no disclosure of 5-sulphonamido substituted compounds, nor is there any suggestion that the compounds concerned possess anti-migraine activity.

Peroutka et al, J. Pharm. Exp. Ther., 237 (3), 901-906 (1986), and Taylor et al, J. Pharm. Exp. Ther., 236 (1), 118-125 (1986), relate to studies on canine basilar artery contractions mediated by serotonin agonists. These studies suggest that serotonin induced contractions of canine basilar artery can be mediated by 5-HT<sub>1A</sub> receptors. These receptors are thought to differ from the 5HT<sub>1</sub>-like receptors mediating the action of the compounds of the present invention.

The following publications are included as representative of some patenting in this area:

GB1556919 - published Nov. 28, 1979;

US 4,530,932 - Issued July 23, 1985; and

US 4,278,677 - Issued July 14, 1981.

Further patents relating to 3-piperidinyI or tetrahydropyridyl-5-substituted indoles having anti-serotonin activity include:

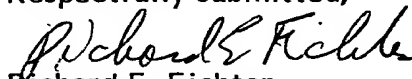
US 4,548,939 - Issued Oct. 22, 1985; and

EP 0200322 - Published Nov. 5, 1986.

The compounds described in these publications are structurally no closer to the compounds of the present invention than those already listed. Furthermore, the compounds are described as 5HT-antagonists, whereas the compounds of the present invention are selective 5HT<sub>1</sub>-like receptor agonists.

In view of the above disclosure of information, an early action on the merits of the application is now believed to be in order and is most respectfully requested.

Respectfully submitted,



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